

ATTORNEY DOCKET NO.
1105-CA (formerly 50246-076)

PATENT

EXPEDITED PROCEDURE

REMARKS

Claims 1-9 and 11-17 are pending in the Application.

Claims 1-9 and 14-17 are allowed.

Claim 11 stands rejected.

Claims 13 and 13 stand objected to.

I. OBJECTION TO THE DRAWINGS

Formal drawings have been filed herewith.

II. OBJECTION TO THE SPECIFICATION

The Specification has been objected to as missing the Serial Numbers for the cross-referenced Applications, and a typographical error on page one. The specification has been amended accordingly hereinabove.

II. REJECTION UNDER 35 U.S.C. §102

Claim 11 has been rejected under 35 U.S.C. §102(b) as being anticipated by *O'Hara et al.*, U.S. Patent No. 4,790,324 (the "*O'Hara*" reference). The Applicant respectfully traverses the rejection of claims 11 under 35 U.S.C. §102.

Claim 11 is directed to a method of testing an integrated circuit. The method includes, external to the integrated circuit, observing an output of a chopper stabilized circuit and, external to the integrated circuit, controlling an offset of the chopper stabilized circuit. Claim 11 has been rejected on the teaching in the *O'Hara* reference disclosing a microcontroller determining a chopper target temperature. (Paper No. 8, page 2) (citing the *O'Hara* reference, column 12, lines 8-10). The Examiner also relies on the disclosure directed to the acquisition of a thermopile temperature by acquiring the output level of the thermopile while looking at the target to be measured, and subtracting from this value the output level stored during the last chop. (Paper

B

**ATTORNEY DOCKET NO.
1105-CA (formerly 50246-076)**

PATENT

EXPEDITED PROCEDURE

No. 8, page 2) (citing the *O'Hara* reference, column 12, lines 47-51). These teachings do not disclose observing the output of a chopper stabilized circuit.

The *O'Hara* reference is directed to a systems and methods for measuring the core temperature of the human body by detecting and analyzing infrared emissions in the external ear (the *O'Hara* reference, column 1, 30-34). To calibrate the infrared detector in the probe, the probe, when not in use, is placed in the chopper unit, which provides an infrared source at a calibration temperature (typically, 98° F). (The *O'Hara* reference, column 12, lines 3-7; column 10, lines 34-37.) The temperature of the reference is maintained at the calibration temperature by a chopper controller circuit, which adjusts the duty cycle of pulses driving resistors that heat the reference. (The *O'Hara* reference, column 9, lines 23-59.) (The use of a variable-duty-cycle pulse is to avoid losses in the driver transistors if a linear circuit were used. The *O'Hara* reference at column 9, lines 50-58.) The controller decreases the average current in the heater resistors if the thermistor output indicates the temperature of the reference is high, and *vice versa* if the thermistor indicates the temperature is low. (The *O'Hara* reference, column 9, lines 24-38.) Thus, the chopper controller as disclosed in the *O'Hara* reference teaches an apparatus that measures the output of a thermistor and adjusts the duty cycle of the current through heating resistors in response thereto.

The Examiner has also relied on the brief description of FIGURE 15 as disclosing the step of, external to the integrated circuit, controlling an offset of the chopper stabilized circuit. (Paper No. 8, page 2) (citing the *O'Hara* reference, column 5, lines 16-19). FIGURE 15 is a flow diagram for a factory calibration procedure, which stores a temperature offset in an EEPROM. (The *O'Hara* reference, FIGURE 15 and column 12, lines 17-22.) The *O'Hara* reference teaches that the factory calibration procedure is different from the calibration or chopping discussed above, and which is performed each time the probe is replaced on the chopper unit. (*Id.*) (This last sentence with respect to the argument is not too clear to me. Please clarify.)

B

**ATTORNEY DOCKET NO.
1105-CA (formerly 50246-076)**

PATENT

EXPEDITED PROCEDURE

Therefore, the chopper controller in the O'Hara reference is defined in the context for calibrating a thermometer or transducer. The O'Hara reference does not in any way teach chopping in the context of the present invention in which a circuit is changed in polarity to correct for offsets. Furthermore, the *O'Hara* reference does not disclose testing an integrated circuit by, external to the circuit, observing an output of a chopper stabilized circuit.

Thus, for at least the aforesaid reasons, the Applicant respectfully contends that the *O'Hara* reference has not been shown to teach all of the limitation of claim 11. Therefore, the *O'Hara* reference does not anticipate claim 11, and claim 11 is allowable under 35 U.S.C. §102 over the *O'Hara* reference.

IV. ALLOWABLE SUBJECT MATTER

Claims 1-9 and 14-17 are allowed. Claims 12 and 13 would be allowable if rewritten in independent form incorporating the limitations of the base claim and any intervening claims. The applicant appreciates the finding of allowability for the aforementioned claims by the Examiner.

V. CONCLUSION

As a result of the foregoing, Applicant asserts that the remaining Claims in the Application are in condition for allowance and respectfully requests an early allowance of such Claims.

Applicant respectfully requests that the Examiner call Applicants' attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining problems.

B

**ATTORNEY DOCKET NO.
1105-CA (formerly 50246-076)**

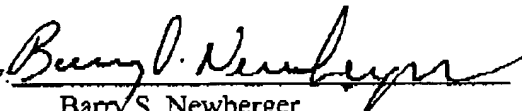
PATENT

EXPEDITED PROCEDURE

The Commissioner is hereby authorized to charge any fees or credit any overpayment to
Deposit Account Number 23-2426 of WINSTEAD SECHREST & MINICK P.C.

Respectfully submitted,

WINSTEAD SECHREST & MINICK P.C.
Attorney for Applicant

By 
Barry S. Newberger
Reg. No. 41.527

5400 Renaissance Tower
1201 Elm Street
Dallas, Texas 75270-2199
(512) 370-2808

AUSTIN_1021011302
2836-P142US 05/29/2003